

REMARKS

Claims 1-19 are currently pending in the application. In the Action dated September 11, 2008, Claim 1 is objected to, and Claims 1-5 and 7-19 were rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,490,015 to Umeyama et al. (“Umeyama”) in view of U.S. Patent No. 5,408,376 to Nishikura et al. (“Nishikura”).

As an initial matter, Applicants extend its appreciation to the Office for recognizing allowability of Claim 6. Moreover, Applicants thanks the Examiner for her time to interview the undersigned on October 8, 2008. The substance of the interview including matters discussed is provided below. At the conclusion of the interview, the Examiner tentatively agreed that the primary reference Umeyama failed to teach each and every element recited in independent Claims 1 and 7, as previously alleged, and Nishikura did not cure the deficiencies.

With respect to the outstanding objection and rejections of the Action, the Office appears to present substantially the same arguments presented in the office action dated January 14, 2008. With respect to the Applicants response dated June 2, 2008, the Office has maintained its rejections as being proper for reasons stated in page 4 of the Action.

Applicants respectfully submits that the Office has misunderstood the disclosure of the primary reference Umeyama and perhaps the structures and operations recited in Applicants’ independent Claims 1 and 7, as discussed during the interview and provided below.

Accordingly, Applicants respectfully provide below remarks so as to point out the deficiencies of the reference Umeyama. Reconsideration of the present application is respectfully requested. It is respectfully submitted that claims 1-19 are in condition for allowance and early notice of the same is solicited.

Regarding the objection of Claim 1, the Action states that “Examiner still considers that it is not clear if the elastic body is to be attached or mounted or supported to the piezoelectric surfaces.” Specifically the Office asserts that the limitation of “an elastic body, to one surface or each of both surfaces of which the piezoelectric or electrostrictive substrate is attached” is

unclear.

Applicants respectfully submit that the public, that is, one skilled in the art in view of Applicants' disclosure in the specification, for example, FIGS. 4 and 5 and corresponding disclosures in the specification, would have clear understanding of the structures recited in Claim 1.

First, the language in question is in plain English as reproduced below:

“an elastic body, to one surface or each of both surfaces of which the piezoelectric or electrostrictive substrate is attached”
(emphasis added for explanation).

Form the language, it is clear that a piezoelectric or electrostrictive substrate is attached to:

- one surface of the elastic body, or
- each of both surfaces of the elastic body.

Second, as an illustration purpose only, FIG. 4 shows an elastic body 20 to which a piezoelectric or electrostrictive substrate 10 is attached to one surface of the elastic body 20, and FIG. 5 shows an elastic body 20 to which a piezoelectric or electrostrictive substrate 10 is attached to each of both surfaces of the elastic body 20.

Finally, as an illustration purpose only, disclosures corresponding to FIGS. 4 and 5 of the specification also teach recited structural aspects of the Claim 1.

It is submitted that one skilled in the art, at least in view of the above would clearly understand what is being recited in Claim 1 and how the recited structures are arranged in reading Claim 1. Accordingly, withdrawal of the objection is respectfully requested. Alternatively, it is respectfully requested that the Office provide detailed explanation as to why one skill in the art in view of Applicants' disclosures would find the claim language in question

unclear.

Regarding the rejection of independent Claims 1 and 7, the Action alleges that Umeyama combined by Nishikura teaches every element of the claims. Applicants respectfully submit that the references cited fail to disclose or suggest the recited claims, now or then. For example, the primary Umeyama appear quite unrelated to the instant application.

For illustration purpose only and without prejudice, that is, to better understand what is disclosed in the instant application and what appears to be disclosed in Umeyama, Applicants provide below discussions of an exemplary embodiment of instant application and apparent applicable summary of Umeyama.

With reference to FIG. 4, according to an exemplary embodiment, there is provided a linear motor having an elastic body 20, a piezoelectric or electrostrictive substrate 10 attached to a surface of the elastic body 20, a movable shaft 30 connected to the other surface of the elastic body 20, and a movable body 40. In an exemplary operation:

- as the piezoelectric or electrostrictive substrate 10 is displaced,
- the movable shaft 30 is operated in conjunction with the displacement, for example, moves back and forth (or up and down depending on a viewer's perspective), and
- in response, with reference to FIG. 2, the movable body 40 moves along the movable shaft 30 (for example, in FIG. 2, movable body 40 is moved from a position of FIG. 2(a) to a position of FIG. 2(f) due to the movements of the movable shaft 30).

Referring again to FIG. 4, Applicants note that in this embodiment, some of the aspects include that the piezoelectric or electrostrictive substrate 10 is not connected to the movable body 40, the movable body 40 is not fixed to the movable shaft 30, and the movable body 40 is moved along the movable shaft 30. Again, it is understood that the above is provided for the purpose of background only and to not limit the pending claims as the claims at issue speak for themselves.

With reference to FIG. 1B, Umeyama appears to disclose an actuator unit 13 for driving a focus adjusting lens 9 of an endoscope 1. The actuator unit 13 appears coupled to the focus adjustment lens 9 via a coupling arm 11 and a lens frame 10. With reference to FIG. 2, Umeyama appears to further disclose that the actuator unit 13 comprises a moving member 16 and a piezoelectric element 17 attached to the moving member 16. The moving member is coupled to the coupling arm 11 via a coupling member 15. Accordingly, it appears the moving member 16 is moved by the piezoelectric element 17 attached to the moving member 16, and travels in an actuator hole 3b to thereby move the lens frame 10. Applicants note that similar structure appears in figures FIGS. 7A, 7B, and 8 cited by the Office. In FIGS. 11A, 11B and 11C, Umeyama appears to disclose that a piezoelectric element 41 may be attached to the lens frame 10 to thereby move the focus adjustment lens 9. Here the lens frame 10 appears to act as a moving member.

That is, it appears that in FIG. 11A of Umeyama, a piezoelectric element 41 is attached to a lens frame 10 and an adjustment lens 9 is fixed to the lens frame. In an operation of Umeyama in this instance, it appears that:

- as the piezoelectric element 41 is displaced,
- the lens frame 10 is operated in conjunction with the displacement, for example, moves back and forth (or up and down depending on a viewer's perspective), and
- as a result, the lens 9 fixed to the lens frame 10 is also displaced concurrently with the lens frame 10.

Applicants note that the lens 9 (asserted as movable body) is fixed to the lens frame 10, and the lens 9 (asserted as movable body) is not moved along the lens frame 10.

Returning now to independent Claims 1 and 7 and the outstanding rejections at issue, Applicants submit that the primary reference Umeyama **does not disclose or suggest,** for example,

- “movable shaft coupled at an end thereof to the elastic body or the piezoelectric or electrostrictive substrate attached to the elastic body,”
- “the movable shaft being operated in conjunction with displacement of the piezoelectric or electrostrictive substrate,” and
- “movable body to be moved along the movable shaft,” as recited in independent Claim 1.

Moreover, **Umeyama fails to disclose or suggest**, for example,

- “movable shaft coupled to the elastic body or the piezoelectric or electrostrictive substrate attached to the elastic body,”
- “movable body to be moved along the movable shaft,” and
- “movable body is moved along with a movement of the movable shaft in conjunction with displacement of the piezoelectric or electrostrictive substrate...to move along the movable shaft,” as recited in independent Claim 7.

Applicants respectfully invite the Office to verify for itself the same after a further review of Umeyama. With respect to the remarks in page 4 of the Action, it is respectfully submitted that the Office has misunderstood the disclosure of the primary reference Umeyama.

With reference to FIG. 1, Nishikura appears to disclose piezoelectric elements 101 and 102 attached to an elastic shim 103. However, Applicants respectfully further submit that Nishikura does not cure the deficiencies of Umeyama. Since Nishikura fails to cure the deficiencies of Umeyama, Applicants respectfully submit that a prima facie case of obviousness is not established as required by 35 U.S.C. §103(a).

Therefore, withdrawal of the rejection is respectfully requested with respect to independent Claims 1 and 7. Because independent Claims 1 and 7 are in condition for allowance, then, at least because of their dependence on these claims respectively, dependent Claims 2-6 and 8-19 are also in condition for allowance.

With respect to dependent claims, for example, previously added dependent claims 15-19, the Action fails to provide substantive reasoning for rejecting these claims. Accordingly, should the Office maintain rejection of independent claims, and maintain rejection of the dependent claims, it is respectfully requested that substantive reasoning be provided for the rejected dependent claims.

The application as now presented, containing Claims 1-19 are believed to be in condition for allowance. Early allowance of the same is respectfully solicited. Again, should the Examiner believe that a telephone conference or personal interview would facilitate resolution of any remaining matters or place any issue in better condition for Appeal, the Examiner may contact Applicants' representative at the number given below.

Respectfully submitted,

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